In the Specification

On page 1, first paragraph, please amend as follows:

Technical Field

~~The present invention~~ This disclosure relates to a poly(lactic acid) polymer composition, formed plastics thereof and a film. More specifically, it relates to a poly(lactic acid) polymer composition which exhibits flexibility by the action of a plasticizer, is free from problems such as evaporation, migration and extraction (bleedout) of the plasticizer and/or losing transparency upon heating and has excellent durability in use. It also relates to formed plastics thereof and a film.

On page 6, second paragraph. please amend as follows:

~~Disclosure of Invention~~ Summary

~~The present invention of~~ We provide a first embodiment ~~is~~ including a poly(lactic acid) polymer composition comprising a poly(lactic acid) polymer exhibiting crystallinity and a plasticizer, in which the plasticizer has at least one poly(lactic acid) segment having a molecular weight of 1200 or more per molecule and comprises a polyether and/or polyester segment.

On page 6, last paragraph spanning page 7, please amend as follows:

~~The present invention of~~ We provide a second embodiment ~~is~~ including a poly(lactic acid) polymer composition comprising a poly(lactic acid) polymer exhibiting crystallinity, a poly(lactic acid) polymer exhibiting no crystallinity, and a plasticizer, in which the plasticizer comprises a polyether and/or polyester segment and has no poly(lactic acid) segment having a molecular weight of 1200 or more.

On page 7, first paragraph, please amend as follows:

~~The present invention of~~ We provide a third embodiment ~~is~~ including a poly(lactic acid) polymer composition comprising a poly(lactic acid) polymer exhibiting crystallinity and having a

melting point lower than 145°C, and a plasticizer, in which the plasticizer comprises a polyether and/or polyester segment and has no poly(lactic acid) segment having a molecular weight of 1200 or more.

On page 7, second paragraph, please amend as follows:

In addition, ~~the present invention of~~ we provide a fourth embodiment ~~is~~ including a poly(lactic acid) polymer composition comprising a poly(lactic acid) polymer exhibiting no crystallinity, and a plasticizer, the composition containing no poly(lactic acid) polymer exhibiting crystallinity, in which the plasticizer comprises a polyether and/or polyester segment.

On page 7, third paragraph, please amend as follows:

The poly(lactic acid) polymer compositions ~~of the present invention~~ have sufficient flexibility and show very small amount of the evaporation, migration and extraction (bleedout) of plasticizers and losing transparency upon heating in use as formed plastics.

On page 7, last paragraph spanning page 8, please amend as follows:

~~Best Mode for Carrying Out the Invention~~ Detailed Description

Poly(lactic acid) polymers for use in the poly(lactic acid) polymer compositions of the first, second, third and fourth embodiments ~~of the present invention~~ are poly (lactic acid) polymers each mainly comprising L-lactic acid and/or D-lactic acid and containing components derived from lactic acid in an amount of 70 percent by weight or more of the total of the polymer. Homopoly(lactic acid)s substantially comprising L-lactic acid and/or D-lactic acid are preferably used as the poly(lactic acid) polymers.

On page 9, first paragraph spanning page 10, please amend as follows:

A lactide process and a direct polymerization process are known as processes for producing a poly(lactic acid). According to the lactide process, a poly(lactic acid) is produced in two steps, i.e.,

by preparing a lactide, a cyclic dimer, from L-lactic acid, D-lactic acid or DL-lactic acid (racemate) as a raw material, and subjecting the lactide to ring-opening polymerization. According to the direct polymerization process, a poly(lactic acid) is produced in one step of subjecting the raw material to direct dehydration condensation in a solvent. The homopoly(lactic acid) ~~for use in the present invention~~ can be prepared by any of the production processes. A homopoly(lactic acid) prepared by the direct polymerization process is substantially free from problems caused by the cyclic dimer and is suitable from the viewpoints of formability and film-forming property. In a polymer prepared by the lactide process, the cyclic dimer contained therein evaporated during forming and causes deposition on a cast drum upon melting film formation or decreased smoothness of the surface of the resulting film. The content of the cyclic dimer in the polymer before forming or melting film formation is preferably controlled to 0.3 percent by weight or less.

On page 10, first paragraph, please amend as follows:

The weight-average molecular weight of the poly(lactic acid) polymer ~~for use in the present invention~~ is generally at least 50000, preferably 80000 to 300000, and more preferably 100000 to 200000. When the average molecular weight is set at 50000 or more, the resulting formed plastics such as a film exhibits satisfactory physical properties in strength.

On page 10, second paragraph spanning page 11, please amend as follows:

The poly(lactic acid) polymer ~~for use in the present invention~~ may be a lactic acid copolymer prepared by copolymerizing another monomer component capable of forming an ester, in addition to L-lactic acid and/or D-lactic acid. Examples of such copolymerizable monomer component are hydroxycarboxylic acids such as glycolic acid, 3-hydroxybutyric acid, 4-hydroxybutyric acid, 4-hydroxyvaleric acid and 6-hydroxycaproic acid; compounds each having plural hydroxyl groups in the molecule, and derivatives thereof, such as ethylene glycol, propylene glycol, butanediol,

neopentyl glycol, poly(ethylene glycol)s, glycerol and pentaerythritol; compounds each having plural carboxylic acids in the molecule and derivatives thereof, such as succinic acid, adipic acid, sebacic acid, fumaric acid, terephthalic acid, isophthalic acid, 2,6-naphthalenedicarboxylic acid, 5-sodiosulfoisophthalic acid and 5-tetrabutylphosphonium sulfoisophthalate. The copolymeric component of the poly(lactic acid) polymer ~~for use in the present invention~~ is preferably selected from among biodegradable components.

On page 11, first paragraph, please amend as follows:

The plasticizers for use in the poly(lactic acid) polymer compositions of the first, second, third and fourth embodiments ~~of the present invention~~ each comprise a polyether and/or polyester segment.

On page 11, second paragraph, please amend as follows:

Such compounds comprising a polyether and/or polyester segment have relatively high affinity for a poly(lactic acid) and highly efficiently serve to plasticize the poly(lactic acid). By introducing a polyether and/or polyester segment into the plasticizer, the flexibility can be imparted to the poly(lactic acid)~~, which is an object of the present invention~~.

On page 11, third paragraph, please amend as follows:

The plasticizers for use in the poly(lactic acid) polymer compositions of the first, second, third and fourth embodiments ~~of the present invention~~ preferably comprise polyether segments, of which poly(alkylene ether) segments are more preferred, of which poly(ethylene glycol) segments are typically preferred.

On page 12, second paragraph, please amend as follows:

When the plasticizer ~~for use in the present invention~~ contains a segment comprising a poly(alkylene ether), an antioxidant such as a hindered phenol or hindered amine antioxidant and/or a

thermal stabilizer such as a phosphorus thermal stabilizer as described later is preferably used, since the poly(alkylene ether) segment is susceptible to oxidation and thermal decomposition upon heating typically in forming.

On page 12, last paragraph spanning page 13, please amend as follows:

The poly(lactic acid) polymer composition of the first embodiment ~~of the present invention~~ will be described below.

On page 13, first paragraph, please amend as follows:

The poly(lactic acid) polymer composition of the first embodiment ~~of the present invention~~ is a poly(lactic acid) polymer composition comprising a poly(lactic acid) polymer exhibiting crystallinity and a plasticizer, in which the plasticizer has at least one poly(lactic acid) segment having a molecular weight of 1200 or more per molecule and comprises a polyether and/or polyester segment.

On page 13, second paragraph, please amend as follows:

When a homopoly(lactic acid) is used in the poly(lactic acid) polymer composition of the first embodiment ~~of the present invention~~, the homopoly(lactic acid) may have an optical purity of 75% or more. If the poly(lactic acid) polymer for use in the poly(lactic acid) polymer composition of the first embodiment ~~of the present invention~~ exhibits no crystallinity, the evaporation, migration and extraction (bleedout) of the plasticizer is not sufficiently controlled.

On page 13, third paragraph, please amend as follows:

The poly(lactic acid) polymer composition of the first embodiment ~~of the present invention~~ comprises a plasticizer that comprises a polyether and/or polyester segment and has, per molecule, at least one poly(lactic acid) segment having a molecular weight of 1200 or more.

On page 14, last paragraph spanning page 14, please amend as follows:

In the plasticizer for use in the poly(lactic acid) polymer composition ~~of the first embodiment~~, the compositional ratio of the L-lactic acid component to the D-lactic acid component constituting the poly(lactic acid) segment is preferably 100:0 to 95:5 or 5:95 to 0:100. The plasticizer having such a compositional ratio can yield a poly(lactic acid) polymer composition that is specifically free from the evaporation, migration and extraction (bleedout) of the plasticizer.

On page 15, first paragraph, please amend as follows:

The poly(lactic acid) polymer composition of the first embodiment ~~of the present invention~~ preferably further comprises a poly(lactic acid) polymer exhibiting no crystallinity. By incorporating a poly(lactic acid) polymer exhibiting no crystallinity, losing transparency upon heating can be controlled at a higher level, in addition to the control of the evaporation, migration and extraction (bleedout) of the plasticizer.

On page 15, second paragraph, please amend as follows:

The proportion of the poly(lactic acid) polymer exhibiting no crystallinity may be set according to the application ~~within a range not deteriorating the advantages of the present invention~~.

On page 16, first paragraph, please amend as follows:

The poly(lactic acid) polymer composition of the first embodiment ~~of the present invention~~ can be formed into a formed plastics. The poly(lactic acid) polymer composition of the first embodiment ~~of the present invention~~ is preferably stretched 1.1 times or more in at least one axial direction to form a formed plastics.

On page 16, last paragraph spanning page 17, please amend as follows:

A nucleating agent for accelerating crystallization may be used in combination when the poly(lactic acid) polymer composition of the first embodiment ~~of the present invention~~ is formed into

a formed plastics. This may accelerate the incorporation of the poly(lactic acid) segment of the plasticizer into the crystals comprising the matrix poly(lactic acid) polymer to thereby anchor the molecule of the plasticizer to the matrix, which in turn may further control the evaporation, migration and extraction (bleedout) of the plasticizer. Examples of the nucleating agent are inorganic nucleating agents such as talc and organic nucleating agents such as erucamide.

On page 17, first paragraph, please amend as follows:

The poly(lactic acid) polymer composition of the first embodiment ~~of the present invention~~ comprises a plasticizer having at least one poly(lactic acid) segment having a molecular weight of 1200 or more per molecule and comprising a polyether and/or polyester segment.

On page 21, first paragraph, please amend as follows:

The poly(lactic acid) polymer composition of the first embodiment ~~of the present invention~~ has sufficient flexibility by using, as the plasticizer, a block copolymer having a PLA (A)-PEG (B)-PLA (A) configuration and having at least one poly(lactic acid) segment having a molecular weight of 1200 or more per molecule. The poly(lactic acid) polymer composition of the first embodiment ~~of the present invention~~ yields formed plastics, such as a film, which shows very small amount of the evaporation, migration and extraction (bleedout) of the plasticizer.

On page 21, second paragraph, please amend as follows:

The poly(lactic acid) polymer composition of the first embodiment ~~of the present invention~~ has excellent durability in use and show very small amount of the evaporation, migration and extraction (bleedout) of the plasticizer.

On page 21, third paragraph, please amend as follows:

The formed plastics, such as a film, comprising the poly(lactic acid) polymer composition of the first embodiment ~~of the present invention~~ exhibits satisfactory durability in use at ordinary temperatures or at relatively low temperatures.

On page 21, fourth paragraph, please amend as follows:

Next, the poly(lactic acid) polymer composition of the second embodiment ~~of the present invention~~ will be illustrated below.

On page 21, last paragraph spanning page 22, please amend as follows:

The poly(lactic acid) polymer composition of the second embodiment ~~of the present invention~~ is a poly(lactic acid) polymer composition comprising a poly(lactic acid) polymer exhibiting crystallinity, a poly(lactic acid) polymer exhibiting no crystallinity, and a plasticizer, in which the plasticizer comprises a polyether and/or polyester segment and has no poly(lactic acid) segment having a molecular weight of 1200 or more.

On page 22, first paragraph, please amend as follows:

The poly(lactic acid) polymer composition of the second embodiment ~~of the present invention~~ essentially comprises a poly(lactic acid) polymer exhibiting crystallinity and a poly(lactic acid) polymer exhibiting no crystallinity. When the poly(lactic acid) polymer composition comprises not a poly(lactic acid) polymer exhibiting no crystallinity but a poly(lactic acid) polymer exhibiting crystallinity alone, the composition exhibits high crystallinity and the resulting formed plastics shows excessively high crystallinity. Thus, the formed plastics undergoes losing transparency in use under heating at a temperature of 100°C or below, such as in the case where the formed plastics comes in contact with boiling water or water vapor.

On page 22, last paragraph spanning page 23, please amend as follows:

When a homopoly(lactic acid) is used as the poly(lactic acid) polymer exhibiting crystallinity in the poly(lactic acid) polymer composition of the second embodiment ~~of the present invention~~, the homopoly(lactic acid) preferably has an optical purity of about 75% or more.

On page 23, first paragraph, please amend as follows:

When a homopoly(lactic acid) is used as the poly(lactic acid) polymer exhibiting no crystallinity in the poly(lactic acid) polymer composition of the second embodiment ~~of the present invention~~, the homopoly(lactic acid) preferably has an optical purity of less than about 70%.

On page 23, second paragraph, please amend as follows:

The poly(lactic acid) polymer composition of the second embodiment ~~of the present invention~~ further comprises a plasticizer. The plasticizer contained in the poly(lactic acid polymer composition of the second embodiment ~~of the present invention~~ comprises a polyether and/or polyester segment and does not have a poly(lactic acid) segment having a molecular weight of 1200 or more.

On page 23, third paragraph, please amend as follows:

Next, the poly(lactic acid) polymer composition of the third embodiment ~~of the present invention~~ will be illustrated below.

On page 23, fourth paragraph, please amend as follows:

The poly(lactic acid) polymer composition of the third embodiment ~~of the present invention~~ is a poly(lactic acid) polymer composition comprising a poly(lactic acid) polymer exhibiting crystallinity and having a melting point lower than 145°C, and a plasticizer, in which the plasticizer comprises a polyether and/or polyester segment and has no poly(lactic acid) segment having a molecular weight of 1200 or more.

On page 23, last paragraph spanning page 24, please amend as follows:

The poly(lactic acid) polymer composition of the third embodiment ~~of the present invention~~ essentially comprises a poly(lactic acid) polymer exhibiting crystallinity and having a melting point of lower than 145°C. The melting point of the poly(lactic acid) polymer herein refers to a peak temperature of crystal fusion as determined using a DSC at temperatures ranging from -30°C to 220°C at a temperature elevation rate of 20°C/min. If the poly(lactic acid) polymer composition of the third embodiment ~~of the present invention~~ comprises a poly(lactic acid) polymer having a melting point of 145°C or higher alone, the poly(lactic acid) polymer composition exhibits high crystallinity and the resulting formed plastics shows excessively high crystallinity. Thus, the formed plastics undergoes losing transparency in use under heating at a temperature of 100°C or below, such as in the case where the formed plastics comes in contact with boiling water or water vapor.

On page 24, second paragraph, please amend as follows:

The plasticizer contained in the poly(lactic acid) polymer composition of the third embodiment ~~of the present invention~~ comprises a polyether and/or polyester segment and does not have a poly(lactic acid) segment having a molecular weight of 1200 or more.

On page 24, last paragraph spanning page 25, please amend as follows:

In the poly(lactic acid) polymer compositions of the first, second and third embodiments ~~of the present invention~~, the weight percentage of the poly(lactic acid) segment component in the plasticizer is preferably less than 50 percent by weight of the total plasticizer. By setting the weight percentage at less than 50 percent by weight based on the total weight of the plasticizer, the plasticizer shows relatively high plasticizing efficiency and can yield a poly(lactic acid) polymer composition having desired flexibility by the addition of the plasticizer in a small amount. The weight percentage of the poly(lactic acid) segment component in the plasticizer ~~for use in the present~~

~~invention~~ is generally 5 percent by weight or more based on the total weight of the plasticizer, while depending on configuration such as the proportion of the plasticizing component in the plasticizer molecule.

On page 25, last paragraph spanning page 26, please amend as follows:

The weight percentage of the plasticizer in the poly(lactic acid) polymer compositions of the first, second and third embodiments ~~of the present invention~~ is preferably set according to required properties such as flexibility and strength. In addition, the weight percentage of the plasticizing component other than the poly(lactic acid) segment component in the plasticizer is preferably 5 percent by weight or more and 30 percent by weight or less based on the total weight of the composition. By setting the weight percentage of the plasticizing component other than the poly(lactic acid) segment component in the plasticizer at 5 percent by weight or more and 30 percent by weight or less of the total composition, the resulting composition exhibits well-balanced mechanical properties such as flexibility and physical properties in strength.

On page 26, first paragraph, please amend as follows:

Next, the poly(lactic acid) polymer composition of the fourth embodiment ~~of the present invention~~ will be illustrated.

On page 26, second paragraph, please amend as follows:

The poly(lactic acid) polymer composition of the fourth embodiment ~~of the present invention~~ is a poly(lactic acid) polymer composition which comprises a poly(lactic acid) polymer exhibiting no crystallinity, and a plasticizer and contains no poly(lactic acid) polymer exhibiting crystallinity, in which the plasticizer comprises a polyether and/or polyester segment.

On page 26, third paragraph, please amend as follows:

The poly(lactic acid) polymer composition of the fourth embodiment ~~of the present invention~~ essentially comprises a poly(lactic acid) polymer exhibiting no crystallinity. When a homopoly(lactic acid) is used as the poly(lactic acid) polymer exhibiting no crystallinity, the homopoly(lactic acid) preferably has an optical purity of less than about 70%.

On page 26, last paragraph, please amend as follows:

The poly(lactic acid) polymer composition of the fourth embodiment ~~of the present invention~~ does not contain a poly(lactic acid) polymer exhibiting crystallinity.

On page 27, first paragraph, please amend as follows:

Other components than the poly(lactic acid) segment of the plasticizer for use in the poly(lactic acid) polymer composition of the fourth embodiment ~~of the present invention~~ are preferably biodegradable components.

On page 27, second paragraph, please amend as follows:

The poly(lactic acid) polymer composition of the fourth embodiment ~~of the present invention~~ is especially useful in use where the resulting formed plastics must be plastically deformed at relatively low temperatures, such as a heat seal component of a multilayer film comprising a poly(lactic acid) polymer, although the composition does not have high heat resistance.

On page 27, third paragraph, please amend as follows:

The poly(lactic acid) polymer compositions of the first, second, third and fourth embodiments ~~of the present invention~~ may further comprise other components ~~within ranges not deteriorating the advantages of the present invention~~. Examples of such components are, for example, known or conventional plasticizers, ~~antioxidants,~~ ultraviolet stabilizers, anticoloring agents, delustering agents,

deodorants, flame retardants, weathering agents, antistatics, mold releasing agents, antioxidants, ion exchanging agents, fine inorganic particles and organic compounds serving as coloring pigments.

On page 27, last paragraph spanning page 28, please amend as follows:

The other components are preferably biodegradable components when used in the poly(lactic acid) polymer compositions of the first, second, third and fourth embodiments ~~of the present invention~~ in addition to the poly(lactic acid) polymers and the plasticizer comprising a polyether and/or polyester segment.

On page 28, first paragraph, please amend as follows:

Examples of the known plasticizers to be contained in the poly(lactic acid) polymer compositions of the first, second, third and fourth embodiments ~~of the present invention~~ are phthalic esters such as diethyl phthalate, dioctyl phthalate and dicyclohexyl phthalate; aliphatic dibasic acid esters such as di-1-butyl adipate, di-n-octyl adipate, di-n-butyl sebacate and di-2-ethylhexyl azelate; phosphoric esters such as diphenyl-2-ethylhexyl phosphate and diphenyloctyl phosphate; hydroxy-polycarboxylic acid esters such as tributyl acetylcitrate, tri-2-ethylhexyl acetylcitrate and tributyl citrate; fatty acid esters such as methyl acetylricinoleate and amyl stearate; polyhydric alcohol esters such as glycerol triacetate and triethylene glycol dicaprylate; epoxy plasticizers such as epoxidized soybean oil, epoxidized linseed oil fatty acid butyl ester and octyl epoxystearate; polyester plasticizers such as poly(propylene glycol) sebacic acid ester; poly(alkylene ether) plasticizers, ether ester plasticizers and acrylate plasticizers. From the viewpoint of safety, plasticizers approved by Food and Drug Administration (FDA) are preferably used.

On page 29, last paragraph spanning page 30, please amend as follows:

Examples of the antioxidants for use in the poly(lactic acid) polymer compositions of the first, second, third and fourth embodiments ~~of the present invention~~ are hindered phenol antioxidants and hindered amine antioxidants.

On page 30, second paragraph, please amend as follows:

Fine inorganic particles may be added to the poly(lactic acid) polymer compositions of the first, second, third and fourth embodiments ~~of the present invention~~ for improving slidability (slipping property) and antiblocking property of the formed plastics. Examples of such fine inorganic particles are silica, colloidal silica, alumina, alumina sol, kaolin, talc, mica and calcium carbonate. The average particle size thereof is not specifically limited and is preferably from 0.01 to 5 μm, more preferably from 0.05 to 3 μm, and further preferably from 0.08 to 2 μm.

On page 30, last paragraph spanning page 31, please amend as follows:

The poly(lactic acid) polymer compositions of the first, second, third and fourth embodiments ~~of the present invention~~ may further comprise any of aliphatic polyesters other than the poly(lactic acid) polymers ~~within ranges not deteriorating the advantages of the present invention~~. Incorporation of aliphatic polyesters other than the poly(lactic acid) polymers reduces the melt viscosity or improves the biodegradability.

On page 31, first paragraph, please amend as follows:

Examples of the aliphatic polyesters other than the poly(lactic acid) polymers for use in the poly(lactic acid) polymer compositions of the first, second, third and fourth embodiments ~~of the present invention~~ are, poly(glycolic acid), poly(3-hydroxybutyrate), poly(3-hydroxybutyrate/3-hydroxyvalerate), polycaprolactone; and polyesters each comprising an aliphatic diol and an aliphatic

dicarboxylic acid. Examples of the aliphatic diol are ethylene glycol and 1,4-butanediol. Examples of the aliphatic dicarboxylic acid are succinic acid and adipic acid.

On page 31, second paragraph, please amend as follows:

The poly(lactic acid) polymer compositions of the first, second and third embodiments ~~of the present invention~~ can be formed into formed plastics such as films and sheets from their molten or dissolved state.

On page 31, last paragraph spanning page 32, please amend as follows:

The poly(lactic acid) polymer compositions of the first, second and third embodiments ~~of the present invention~~ exhibit satisfactory flexibility, transparency and physical properties in strength and can be used in wider ranges of applications than conventional equivalents. They can be used, for example, as packaging materials such as packaging wrap films and stretch films; industrial materials such as agricultural films, films for labels, films for tapes, films for protecting base materials, sheets for protecting automobile coatings, trash bags and compost bags; packages and containers such as bottles for beverages or cosmetics, disposable caps and trays; as well as nursery cabinets and flower pots.

On page 32, first paragraph, please amend as follows:

The poly(lactic acid) polymer compositions of the first, second and third embodiments ~~of the present invention~~ can be formed into films according to a conventional production process of a stretched film, such as blow-extrusion (inflation), sequential biaxial stretching or simultaneous biaxial stretching.

On page 33, second paragraph, please amend as follows:

The formed plastics, such as a film, comprising the poly(lactic acid) polymer composition of the first embodiment ~~of the present invention~~ exhibits satisfactory durability in use at ordinary temperatures or at relatively low temperatures.

On page 33, last paragraph spanning page 34, please amend as follows:

The poly(lactic acid) polymer compositions of the second, third and fourth embodiments ~~of the present invention~~ show markedly reduced losing transparency in use under heating and exhibit satisfactory durability.

On page 34, first paragraph, please amend as follows:

The poly(lactic acid) polymer compositions of the first, second and third embodiments ~~of the present invention~~ are typically effective in the fields of formed plastics such as films in which the evaporation, migration and extraction (bleedout) of the plasticizer may be avoided in many cases.

On page 34, second paragraph spanning page 35, please amend as follows:

When the poly(lactic acid) polymer compositions of the first, second and third embodiments ~~of the present invention~~, for example, are used as packaging wrap films, the packaging wrap films exhibit practically satisfactory flexibility, transparency and physical properties in strength from immediately after the beginning of use, and show very small amount of the evaporation, migration and extraction (bleedout) of the plasticizer with elapse of time in use and losing transparency in use under heating. The packaging wrap films can thereby maintain their initial flexibility and transparency over a long period of time in use. The use of a biodegradable plasticizer yields packaging wrap films that can be converted into compost without separation from the content such as food after use. The compositions exhibit satisfactory stability with time and can yield formed plastics, such as films, that can exhibit initial performance without deterioration even over a long

time after the preparation. The compositions also yield formed plastics, such as films, that stably exhibit flexibility and transparency even after dry thermal processing or treatment at high temperatures in after-processing steps of the formed plastics. In addition, the resulting formed plastics do not undergo losing transparency even in use under heating.

On page 35, first paragraph, please amend as follows:

The poly(lactic acid) polymer compositions of the first, second and third embodiments ~~of the present invention~~ can be stretched 1.1 times or more in at least one axial direction to yield formed plastics such as films.

On page 35, second paragraph, please amend as follows:

The films comprising the poly(lactic acid) polymer compositions of the first, second and third embodiments ~~of the present invention~~ are often prepared by stretching the compositions 1.1 times or more in at least one axial direction. To avoid ununiform stretching under some stretching conditions such as stretching temperature and stretching (deformation) speed, the compositions are preferably stretched 2 times or more, and more preferably 2.5 times or more to yield films.

On page 35, last paragraph spanning page 36, please amend as follows:

By stretching the poly(lactic acid) polymer composition of the first embodiment ~~of the present invention~~ 1.1 times or more in at least one axial direction to yield a film, the matrix poly(lactic acid) polymer is further highly oriented and crystallized, and the poly(lactic acid) segment of the plasticizer is further incorporated into the crystal. Thus, the resulting film is further prevented from the evaporation, migration and extraction (bleedout) of the plasticizer. The orientation and crystallization also improves the physical properties in strength of the film, and the film exhibits both satisfactory flexibility and strength.

On page 36, first paragraph, please amend as follows:

To prepare biaxially stretched films from the poly(lactic acid) polymer compositions of the first, second and third embodiments ~~of the present invention~~, the compositions are stretched preferably 4 times or more, and more preferably 7 times or more in terms of areal magnification ratio as an areal ratio of the film between before and after stretching.

On page 36, last paragraph spanning page 37, please amend as follows:

The films derived from the poly(lactic acid) polymer compositions of the first, second and third embodiments ~~of the present invention~~ preferably each have a tensile modulus of elasticity of 100 to 1500 MPa. The tensile modulus of elasticity of such a film can be set at a desired level by controlling the amount and type of the plasticizer in the composition, and film-forming conditions. The tensile modulus of elasticity is preferably set at 1500 MPa or less. This gives good usability to the films in the applications such as trash bags, agricultural mulch films, stretch films, films for labels, films for tapes, films for protecting base materials, films for bags, and packaging films. In addition, the above configuration easily gives sufficient adhesion to the films when they are used as wrap films for food packaging, since the films sufficiently deform in accordance with the shape of a material to be packaged. By setting the tensile modulus of elasticity at 100 MPa or more, the resulting films can be satisfactorily unwound when they are wound as a roll, and can pass through the film-forming and processing processes.

On page 37, first paragraph, please amend as follows:

The films derived from the poly(lactic acid) polymer compositions of the first, second and third embodiments ~~of the present invention~~ preferably each have a heat resistance of 120°C to 230°C. The heat resistance of the films is determined according to a method described in the examples. The films having a heat resistance of 120°C or higher are substantially free from adhesion

to a heating roller during film-formation and stretching, adhesion to members during heat setting, and blocking after film-formation and are excellent in process stability. In addition, the resulting films when used as wrap films for food packaging are substantially free from breaking, or melting and deposition onto an article to be packaged, even when they are brought into contact with hot water or heated in a microwave oven.

On page 37, last paragraph spanning page 38, please amend as follows:

The films derived from the poly(lactic acid) polymer compositions of the first, second and third embodiments ~~of the present invention~~ each mainly comprise the poly(lactic acid) polymer. The melting point of the poly(lactic acid) is generally at highest 230°C, and the upper limit of the heat resistance of the films ~~according to the present invention~~ is pursuant to this.

On page 38, first paragraph, please amend as follows:

A poly(L-lactic acid) has a melting point of about 170°C even at an optical purity of 98% or more. In contrast, a "stereo complex crystal" has a melting point of about 220°C to about 230°C. In the stereo complex crystal, poly(lactic acid) molecules of optical isomers (for example, a poly(L-lactic acid) and a poly(D-lactic acid)) constitute the crystal in a pair. A combination use of, for example, a poly(L-lactic acid) and a poly(D-lactic acid) each having an optical purity of 95% or more as the poly(lactic acid) polymer is preferred to impart heat resistance of higher than 170°C to formed plastics, typically films, derived from the poly(lactic acid) polymer compositions of the first, second and third embodiments ~~of the present invention~~.

On page 38, second paragraph, please amend as follows:

The formed plastics, especially a film, derived from thepoly(lactic acid) polymer composition of the first embodiments ~~of the present invention~~ may have a configuration in which the poly(lactic acid) polymer is, for example, a poly(L-lactic acid) having an optical purity of 95% or more, and the

poly(lactic acid) segment of the plasticizer is one comprising 98 percent by weight or more of a component derived from D-lactic acid.

On page 38, last paragraph spanning page 39, please amend as follows:

The poly(lactic acid) polymer compositions of the first, second and third embodiments ~~of the present invention~~ each preferably contain equivalent amounts or substantially equivalent amounts of a component derived from L-lactic acid and a component derived from D-lactic acid, in order to further accelerate the formation of the stereo complex crystal in the formed plastics, especially films, derived from the compositions.

On page 39, first paragraph, please amend as follows:

The films derived from the poly(lactic acid) polymer compositions of the first, second and third embodiments ~~of the present invention~~ inherently have satisfactory transparency and preferably each have a film haze of 0.2% to 5%. The film haze herein refers to a film haze which is measured by a method described in the examples and is converted in terms of a film thickness of 10 μm according to a proportional calculation. A film having a film haze of 0.2% to 5% is suitable as a packaging wrap film typically as a wrap film for food packaging, since the content can be easily seen. For use in applications which require certain masking property or require a low optical transmittance or a high absorptivity with respect to solar light, as in trash bags and agricultural mulch films, coloring pigments, for example, may be added according to necessity.

On page 39, last paragraph spanning page 40, please amend as follows:

The films derived from the poly(lactic acid) polymer compositions of the first, second and third embodiments ~~of the present invention~~ preferably each have an adhesion of 5 to 30 N/cm^2. The adhesion herein is determined by a method described in the examples. A film having an adhesion of 5 to 30 N/cm^2 is suitably used as a wrap film for food packaging. The resulting packaging wrap film

is free from spontaneous peeling off during use due to insufficient adhesion and is free from deteriorated releasability from a roll due to blocking. It can be smoothly taken out from a roll, exhibits appropriate adhesiveness in use and has satisfactory usability.

On page 40, first paragraph, please amend as follows:

The thickness of the films derived from the poly(lactic acid) polymer compositions of the first, second and third embodiments ~~of the present invention~~ is not specifically limited and can be set at an appropriate thickness according to the application. The thickness of the films is generally 5 μm or more and 1 mm or less, and is preferably 5 μm or more and 200 μm or less. As packaging wrap films, typically as wrap films for food packaging, the thickness is preferably set within a range of 5 μm or more and 25 μm or less.

On page 41, first paragraph, please amend as follows:

(EXAMPLES)

~~The present invention~~ This disclosure will be illustrated in further detail with reference to several examples below, which are not intended to limit the scope of the ~~invention~~ appended claims.

On page 85, first paragraph, please amend as follows:

Industrial Applicability

The poly(lactic acid) polymer compositions ~~of the present invention~~ exhibit satisfactory flexibility and show very small amount of the evaporation, migration and extraction (bleedout) of plasticizers and losing transparency upon heating in use as formed plastics, which properties have not yet been achieved by conventional technologies. The poly(lactic acid) polymer compositions ~~of the present invention~~ are usable in a wide variety of applications, for example, as formed plastics such as packaging wrap films and other films.

On page 85, last paragraph, please amend as follows:

In addition, the poly(lactic acid) polymer compositions ~~of the present invention~~ exhibit biodegradability in natural environment higher than conventional plastics and can be relatively easily degraded in natural environment after use. The poly(lactic acid) polymer compositions ~~of the present invention~~ are very useful for solving environmental issues caused by plastic wastes.